

[illegible]

wherein a second valve closure member (38, 55, 75) cooperates with a second valve seat surface (40, 56) in the valve seat body (32, 50) to form a second sealing seat (41, 57), and the valve needle (34, 51, 73) or the first valve closure member (35, 52) has a limit stop, at which, after a partial stroke (h_1) of the valve needle (34, 51, 73), a counter limit stop of the second valve closure member (38, 55, 75) comes into contact and lifts the second valve closure member (38, 55, 75) in a further stroke of the valve needle (34, 51, 73) from the second sealing seat (41, 57).

3. The fuel injector as recited in Claim 2,
wherein a second circumferential hole circle (46) having a
plurality of spray-discharge bore holes (44) is arranged so
that the first sealing seat (36) and the second sealing seat
(41) seal the second hole circle (46) with respect to a fuel
supply (45a).

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member (35) surrounds and guides the second valve closure member (38).

5. The fuel injector as recited in Claim 4, wherein the second valve closure member (38) is guided in a bore hole (37) of the valve needle (34, 73) or of the first valve closure member (35), and is biased **[prestressed]** against the second sealing seat (41) by a spring (39), which is supported against the valve needle (34, 73) or the first valve closure member (35).

6. The fuel injector as recited in Claim 5, wherein the limit stop of the valve needle (34, 73) or of the first valve closure member (35) is a step (43) in the bore hole (37), and the counter limit stop of the second valve closure member (38) is a projecting collar (42).

7. The fuel injector as recited in Claim 2, wherein the second valve closure member (55) surrounds the valve needle (51) or the first valve closure member (52).

8. The fuel injector as recited in Claim 7, wherein the second valve closure member (55) is guided by the first valve closure member (52) and is biased **[prestressed]** against the second sealing seat (57) by a spring (58), which is supported against a spring receptacle of the fuel injector, and
a second circumferential hole circle (66) having a plurality of spray-discharge bore holes (64) is arranged so that the second sealing seat (57) seals the second hole circle (66) radially on the interior, and a third sealing seat (69), which is formed by the second valve closure member (55) having the valve seat body (50) on a third valve seat surface (68), seals the second hole circle (66) radially to the outside with respect to a further fuel supply.

9. The fuel injector as recited in Claim 8,

Abstract

A fuel injector, in particular, an injector for fuel injection systems of internal combustion engines, having an actuator, which cooperates with a valve needle (34, 51, 73), has a first valve closure member (35, 52) that is arranged on the valve needle (34, 51, 73), the valve closure member cooperating with a first valve seat surface (33, 53) on a valve body (32, 50) forming a first sealing seat (36, 54). A second valve closure member (38, 55, 75) cooperates with a second valve seat surface (40, 56) in the valve seat body (32, 50) forming a second sealing seat (41, 57). The valve needle (34, 51, 73), or the first valve closure member (35, 52), has a limit stop, against which, after a partial stroke (h_1) of the valve needle (34, 51, 73), a counter limit stop of the second valve closure member (38, 55, 75) strikes, lifting the second valve closure member (38, 55, 75) from the second sealing seat (41, 57) in response to a further stroke of the valve needle (34, 51, 73).

(Figure 2)